Yvonne Bolton, Acting Chief Bureau of Water Management Connecticut Department of Environmental Protection 79 Elm Street Hartford, CT 06106

Dear Ms. Bolton:

Thank you for your submittal of the 2004 Clean Water Act Section 303(d) list, Connecticut Water Bodies Not Meeting Water Quality Standards. In accordance with §303(d) of the Clean Water Act and 40 CFR §130.7, the U.S. Environmental Protection Agency (EPA) conducted a complete review of Connecticut's 2004 §303(d) list and supporting documentation. Based on this review, EPA has determined that Connecticut's list of water quality limited segments still requiring total maximum daily loads meets the requirements of §303(d) of the Clean Water Act ("CWA" or "the Act") and EPA's implementing regulations. Therefore, by this letter, EPA hereby approves Connecticut's §303(d) list. Connecticut was the first State in the Region to submit its list and you are the first New England State to receive approval.

The submittal includes a list of those waters for which technology based and other required controls for point and nonpoint sources are not stringent enough to attain or maintain compliance with the State's Water Quality Standards. The submittal presents Connecticut's total maximum daily load strategy which describes the priority setting approach and identifies those waters for which total maximum daily loads will be completed and submitted during the next two years. The statutory and regulatory requirements, and EPA New England's review of Connecticut's compliance with each requirement, are described in detail in the enclosed approval documents.

The Connecticut Department of Environmental Protection has also successfully completed a public participation process during which the public was given the opportunity to review and comment on the §303(d) list. As a result of this effort, Connecticut has considered public comments in the development of the final list. A summary of the public comments and DEP's response to comments was included in the final submittal.

We are pleased with the quality of your submittal and appreciate the level of effort that CT DEP

has devoted to preparing the 2004 §303(d) list. Your staff have done an excellent job of preparing a comprehensive and informative list, and providing EPA with thorough supporting documentation and assistance. My staff and I look forward to continued cooperation with DEP in implementing the requirements under §303(d) of the CWA. Please feel free to contact me or Lynne Hamjian (617-918-1601), if you have any questions or comments on our review.

Sincerely,

/s/

Linda M. Murphy, Director Office of Ecosystem Protection

Enclosures

cc: Betsey Wingfield, CT DEP Lee Dunbar, CT DEP Kelly Streich, CT DEP Lynne Hamjian, EPA Ann Williams, EPA Steven Winnett, EPA Stephen Silva, EPA

EPA - NEW ENGLAND'S REVIEW OF CONNECTICUT'S 2004 SECTION 303(d) LIST June 22, 2004

I. PURPOSE

The purpose of this review document is to describe the rationale for EPA - New England's approval of Connecticut's (CT) 2004 Section 303(d) list. The following sections identify key elements to be included in the list submittal based on the Clean Water Act (CWA) and EPA regulations (see 40 CFR §130.7). EPA - New England reviewed CT's methodology used to develop the §303(d) list and CT's description of the data and information it considered. Our review of CT's §303(d) list is based on an analysis of whether CT reasonably considered all existing and readily available water quality-related data and information, and reasonably identified waters required to be listed. EPA also closely examined all the requests Connecticut made to remove water bodies from the 2004 §303(d) list that had appeared on the previous list in 2002 to ensure that only those which had the proper justification were allowed to be removed. The paragraphs below are arranged to reflect the organization of guidance from EPA, titled, "Recommended Framework for EPA Approval Decisions on 2002 State Section 303(d) List Submissions," transmitted in a memorandum from EPA Headquarters dated May 20, 2002.

II. STATUTORY AND REGULATORY BACKGROUND

Identification of WQLSs for Inclusion on Section 303(d) List

Section 303(d)(1) of the Act directs States to identify those waters within their jurisdiction for which effluent limitations required by section 301(b)(1)(A) and (B) are not stringent enough to implement any applicable water quality standard, and to establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters. The Section 303(d) listing requirements apply to waters impaired by point and/or nonpoint sources, pursuant to EPA's long-standing interpretation of Section 303(d).

EPA regulations provide that States do not need to list waters where the following controls are adequate to implement applicable standards: (1) technology-based effluent limitations required by the Act, (2) more stringent effluent limitations required by State or local authority, and (3) other pollution control requirements required by State, local or federal authority. See 40 CFR §130.7(b)(1).

Consideration of Existing and Readily Available Water Quality-Related Data and Information

In developing Section 303(d) lists, States are required to assemble and evaluate all existing and readily available water quality-related data and information, including, at a minimum, consideration of existing and readily available data and information about the following categories of waters: (1) waters identified as partially meeting or not meeting designated uses, or

as threatened, in the State's most recent Section 305(b) report; (2) waters for which dilution calculations or predictive modeling indicate nonattainment of applicable standards; (3) waters for which water quality problems have been reported by governmental agencies, members of the public, or academic institutions; and (4) waters identified as impaired or threatened in any Section 319 nonpoint assessment submitted to EPA. See 40 CFR §130.7(b)(5). In addition to these minimum categories, States are required to consider any other data and information that is existing and readily available. EPA's Guidance for 2004 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act describes categories of water quality-related data and information that may be existing and readily available. See Guidance for 2004 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act, U.S. EPA Office of Water, July 21, 2003, Section II, L. ("What information should the report include documenting that the State considered all available data and information in developing their Integrated Report?"). While States are required to evaluate all existing and readily available water quality-related data and information, States may decide to rely or not rely on particular data or information in determining whether to list particular waters.

In addition to requiring States to assemble and evaluate all existing and readily available water quality-related data and information, EPA regulations at 40 CFR §130.7(b)(6) require States to include as a part of their submissions to EPA documentation to support decisions to rely, or not rely, on particular data and information and decisions to list or not list waters. Such documentation needs to include, at a minimum, the following information: (1) a description of the methodology used to develop the list; (2) a description of the data and information used to identify waters; and (3) any other reasonable information requested by the Region.

Priority Ranking

EPA regulations codify and interpret the requirement in Section 303(d)(1)(A) of the Act that States establish a priority ranking for listed waters. The regulations at 40 CFR §130.7(b)(4) require States to prioritize waters on their Section 303(d) lists for TMDL development, and also to identify those water quality limited segments (WQLSs) targeted for TMDL development in the next two years. In prioritizing and targeting waters, States must, at a minimum, take into account the severity of the pollution and the uses to be made of such waters. See Section 303(d)(1)(A). As long as these factors are taken into account, the Act provides that States establish priorities. States may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs, vulnerability of particular waters as aquatic habitat, recreational, economic, and aesthetic importance of particular waters, degree of public interest and support, and state or national policies and priorities. See 57 Fed. Reg. 33040, 33045 (July 24,1992), and EPA's July 2003 Guidance listed below.

III. REVIEW OF CT'S §303(d) SUBMISSION

EPA-New England reviewed Connecticut's Draft 2004 Section 303(d) list dated February 27, 2004. The Connecticut Department of Environmental Protection (CT DEP) revised the list based

on comments received during the public comment period and on EPA comments (EPA letter to CT DEP dated April 7, 2004). The CT Final 2004 §303(d) list was submitted to EPA-New England on April 30, 2004, along with other submittals related to the status of water quality standards attainment of the State's waters. These submittals are identified below.

- 1. 2004 List of Connecticut Water Bodies Not Meeting Water Quality Standards, including:
 - (A) Lists of adopted TMDLs, water bodies with work in progress toward development of TMDLs, and water bodies under the Connecticut Fish Consumption Advisory (information additional to that required for the §303(d) list)

Appendix A - Tier 4 waterbodies where pollution control measures are expected to result in attainment of water quality standards

- (A) Appendix B 2004 List of Water Bodies Not Meeting Water Quality Standards
- (B) Appendix C Reconciliation of the 2002 and 2004 Impaired Waters Lists
- 2. Connecticut Consolidated Assessment & Listing Methodology (CALM) for §305(b) and §303(d) Reporting
- 3. Responsiveness Summary: Response to Comments. 2004 List of Waters Not Meeting Water Quality Standards

CT DEP conducted a public participation process in which it provided the public the opportunity to review and comment on the 2004 draft §303(d) list. DEP sent out notices to several hundred groups, agencies, municipal authorities, and individuals, inviting them to comment on the list, and it placed notices and copies of the list documents on the DEP website. In addition, DEP held a public information meeting on March 24, 2004 at its office in Hartford to describe the §303(d) listing process and to answer questions pertaining to both the list and future TMDL activities. EPA concludes that CT's public participation process was consistent with its Continuous Planning Process (CPP), and that CT provided sufficient public notice and opportunities for public involvement and response.

CT received comments on the draft list from one watershed organization, a citizen, the Regional Water Authority, and EPA New England. CT DEP prepared a "Response to Comments" document which lists each comment and the State's response. EPA-New England reviewed CT DEP's responses and concludes that CT adequately responded to the comments.

With respect to one comment requesting inclusion of flow-impaired waters on the §303(d) list, EPA notes that only impairments associated with pollutants are required to be included on the §303(d) list. We are not aware of any information suggesting that there are flow-impaired

waters which are also impaired by a pollutant that have not been included on the §303(d) list. Therefore, as the methodology CT DEP used follows EPA's guidance in this regard, we feel that the State's actions on waters only impaired by low flow are reasonable.

IV. ANALYSIS OF CONNECTICUT'S SUBMISSION

Identification of Waters and Consideration of Existing and Readily Available Water Quality-Related Data and Information

EPA reviewed the State's submission, and has concluded that the State developed its Section 303(d) list in compliance with Section 303(d) of the Act and 40 CFR §130.7. EPA's review is based on its analysis of whether the State reasonably considered existing and readily available water quality-related data and information and reasonably identified waters required to be listed.

CT DEP generated the 2004 Section 303(d) list as a subset of its Section 305(b) report. It considered the most recent (2002) §303(d) list and §305(b) report, and added water bodies to the list as indicated by its review of all existing and acceptable data and information. DEP consulted with its nonpoint source unit about water bodies impaired by nonpoint sources of pollution (NPS) that should be included on the list.

CT DEP has categorized water bodies on its list or for removal from the list with its own tiered system, which follows EPA's §305(b) and §303(d) list categories as set forth in EPA's July 21, 2003 integrated guidance, "Guidance for 2004 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act," as follows:

EPA Category	CT Tier	Explanation
4A	1	TMDL has been developed
4B	4	Removed from list, other enforceable control authority expected to result in attainment of water quality standards
4C	5	Removed from list, impairment is not caused by a pollutant
5A	2	TMDL required, impairment is caused by a pollutant
5B	3	TMDL required, cause of impairment is unknown

Categories 5A and 5B comprise the CT §303(d) list, which EPA reviewed and is approving in this action. Categories 4A-C are not part of the §303(d) list, although they appear on the list in the submitted documents. EPA Categories 1-3 do not appear in CT's list documents and are not components of the §303(d) list.

CT's §303(d) list for 2004 contains many water bodies with more than one segment. In many cases, a segment may have more than one impaired designated use. In some cases, a single

water body segment has several impaired uses for which it is listed and for which the impaired uses have different priorities for TMDL development. Several water body segments have multiple impaired uses for which one or more of the impaired uses may be on the §303(d) list and one or more may be taken off because the impairment is either not due to a pollutant (EPA Category 4C, CT Tier 5) or because other actions are expected to fix the problem (EPA Category 4B, CT Tier 4). Several other segments have an impaired use for which a TMDL has already been developed, and one or more others for which a TMDL will still be needed.

Connecticut identified, when known, the pollutant(s) causing or suspected to cause exceedences of the applicable water quality standards. CT identifies pollutants on the list in the column entitled "Cause (Potential Cause)."

DEP removed water bodies:

- which have been found to meet water quality standards and support designated uses based on new data collected or data newly assessed since the 2002 list was issued;
- which, in the absence of data, were originally listed based on a situation known to be causing an impairment, and for which the situation has now been corrected and DEP has no reason to believe that anything other than the corrected situation was creating a problem or would prevent standards from being attained;
- for which TMDLs have been developed and approved in the intervening years;
- which are expected to meet standards in the near future based on other enforceable control measures.

DEP provided EPA with information specific to each water body for which it requested delisting. Based on the information in the list document's Appendix C (the reconciliation of the 2002 and 2004 lists), DEP's responsiveness document, CT's ADB database of impaired waters, and several phone calls with DEP staff, EPA received information sufficient to justify the removal of the water bodies for which DEP requested delisting. EPA concurs that the removal of these water bodies from the §303(d) list is appropriate and consistent with the Clean Water Act and EPA's regulations.

DEP considered all types of data and information regarding §130.7(b)(5) categories, which is the minimum required by regulations. DEP considered information from a wide range of local, state and federal agencies, academic and consultant sources, including its own volunteer monitoring program network.

EPA has reviewed Connecticut's description of the data and information it considered, its methodology for identifying waters, and its Section 305(b) database (ADB). EPA concludes that the State properly assembled and evaluated all existing and readily available data and information relating to the categories of waters specified in 40 CFR §130.7(b)(5).

In its "Consolidated Assessment & Listing Methodology for §305(b) and §303(d) Reporting, April 2004," which it provided in its submissions to EPA, DEP explained its rationale on data

quality, and which data will not meet its criteria for quality necessary to support listing or assessment decisions. EPA concurs that DEP's criteria for use of data are appropriate.

Waters which are not listed on Connecticut's 2004 §303(d) List

The State has demonstrated, to EPA's satisfaction, good cause for not including the following waters on its list. As provided in 40 CFR §130.7(b)(6)(iv), EPA requested that the State demonstrate good cause for not including these waters.

1. Waters not listed because they meet water quality standards

Based on information provided by DEP that the following water bodies listed as impaired for aquatic life use support in 2002 now meet water quality standards which support that use, EPA approves their removal from the 2004 list:

Willimantic River, segments 5 and 6 Middle River, segment 1

DEP has provided information indicating that the following water bodies listed as impaired for <u>primary contact recreation</u> in 2002 now meet water quality standards which support that use, and we approve their removal from the 2004 list:

Long Island Sound East - Old Lyme Shore, segment 3 Willimantic River, segments 3, 5, and 6 Middle River, segment 1 New Haven Harbor - Outer Harbor/Morris Cove, segment 3

Willimantic River, segment 4 was listed in 2002 due to the presence of a waste water discharge known to cause impairment to primary contact recreation. No data were used as a basis for the listing. The discharge has now been removed and DEP has stated they have no reason to believe that anything other than the discharge was causing the impairment. EPA concurs that it is appropriate to remove this water body from the list for its <u>primary contact recreation</u> impairment, and approves the removal.

Branford Harbor, segment 1, was listed in 2002 due to a waste water treatment plant that was undergoing an upgrade, and was presumed to be causing a water quality impairment. No data were used as a basis for the listing. The upgrades have now been completed and DEP has stated they have no reason to believe that anything other than the plant's condition before and during the upgrade was causing the impairment. EPA concurs that it is appropriate to remove this water body from the list for its <u>primary contact recreation</u> impairment, and approves the removal.

DEP provided information indicating that Branford Harbor, segment 2, listed as impaired for shellfishing in 2002, now meets water quality standards which support that use, and we approve its removal from the list.

2. Waters not listed because they are subject to other pollution control requirements and are expected to meet WQSs

The State's decision not to include the following waters on its 2004 Section 303(d) list is consistent with EPA regulations at 40 CFR §130.7(b)(1). Some of these waters were identified on the State's 2002 Section 303(d) list, while some others were delisted in the last cycle. Under 40 CFR §130.7(b)(1), States are not required to list WQLSs still requiring TMDLs where effluent limitations required by the CWA, more stringent effluent limitations required by State or local authority, or other pollution control requirements required by State, local, or federal authority, are stringent enough to implement applicable water quality standards. The most recent guidance specifies that these various requirements must implement applicable water quality standards in a reasonable amount of time to support a State's decision not to list particular waters. A reasonable amount of time is defined in Section II(E)(5) of the 2004 guidance document, referenced above.

Monitoring should be scheduled for these waters to verify that the water quality standard is attained as expected in a reasonable time frame. Where standards will not be attained through implementation of the requirements listed in 40 CFR §130.7(b)(1) in a reasonable time, it is appropriate for the water to be placed on the Section 303(d) list to ensure that implementation of the required controls and progress towards compliance with applicable standards is tracked. If it is determined that the water is meeting applicable standards when the next Section 303(d) list is developed, it would be appropriate for the State to remove the water from the list at that time.

Connecticut has removed the following waters from the §303(d) list based on the expectation that they will meet water quality standards within a reasonable time as a result of other required pollution control measures:

Ruby Lake outlet stream, segment 1 Bladdens River Tributary, segment 1 Mill River, segment 2 Upper Mill Pond, segments 1 and 2

Consistent with the EPA-approved delisting of waters for the 2002 listing cycle, Connecticut has continued not to list the following water body segments based on the expectation that they will meet water quality standards within a reasonable time as a result of other required pollution control measures:

Unnamed tributary to Cedar Swamp and unnamed intermittent stream Pine Lake (Malone's Pond)
Birge Pond
Silver Lake
Eightmile River, Southington
Edgewood Park Pond

Housatonic River segments 3-7 Lake Lillinonah Lake Zoar (Aquatic Life Use Support listing) Lake Zoar segments 1 & 2 (Fish Consumption listing) Lake Housatonic.

Please see Memorandum to File, dated 6/22/04, for details on each water body and their qualifications for meeting the criteria for not listing or delisting.

The State has demonstrated in Appendix A of the list document that there are other pollution control requirements required by State, local, or federal authorities that will result in attainment of water quality standards within a reasonable amount of time for the impairments for which these water bodies would otherwise be listed. Connecticut has demonstrated that the required controls are specific to the water quality problem in each water body and are designed to remediate the problem and restore the impaired use. The State's submission demonstrates that these requirements will result in attainment of applicable water quality standards for the water bodies and those impairments for which they are listed within a reasonable amount of time, as the required control measures include schedules for implementation of the control actions and for attainment of water quality standards. The control measures also specify plans to monitor attainment and maintenance of standards where necessary.

EPA approves the State's decision not to list these water bodies pursuant to 40 CFR §130.7(b)(1)(iii).

Waters impaired by nonpoint sources of pollution

The State properly listed waters with nonpoint sources causing or expected to cause impairment, consistent with Section 303(d) and EPA guidance. Section 303(d) lists are to include all WQLSs still needing TMDLs, regardless of whether the source of the impairment is a point and/or nonpoint source. EPA's long-standing interpretation is that Section 303(d) applies to waters impacted by point and/or nonpoint sources. In 'Pronsolino v. Marcus,' the District Court for the Northern District of California held that section 303(d) of the Clean Water Act authorizes EPA to identify and establish total maximum daily loads for waters impaired by nonpoint sources. Pronsolino v. Marcus, 91 F. Supp. 2d 1337, 1347 (N.D.Ca. 2000). This decision was affirmed by the 9th Circuit Court of Appeals in Pronsolino v. Nasti, 291F. 3d 1123 (9th Cir. 2002). See also EPA's 1991 Guidance and National Clarifying Guidance for 1998 Section 303(d) Lists, Aug. 27, 1997.

Priority Ranking and Targeting

EPA also reviewed the State's priority ranking of listed waters for TMDL development, and concludes that the State properly took into account the severity of pollution and the uses to be made of such waters, as well as other relevant factors such as the complexity of the impairment and availability of quality information on it, and the likelihood that a remedy might be

implemented before a TMDL could be developed (see below). In addition, EPA reviewed the State's identification of WQSLs targeted for TMDL development in the next two years, and concludes that the targeted waters are appropriate for TMDL development in this time frame.

Connecticut generally bases the development of its priority ranking on the severity of the pollution and the uses to be made of such waters, and the factors listed in the 1991 Guidance, especially waters ranked as high priority ("H", see below).

Connecticut includes other factors such as the availability and quality of data identifying the causes for non-attainment of WQS, and the extent of the water quality problems. Connecticut also bases its ranking in part on the likelihood that a water body's impairment may be resolved before a TMDL is developed.

Connecticut has identified waters for which TMDLs may be completed during the next 2 years (designated by "T"), and those waters still requiring the development of TMDLs are prioritized as high (H), medium (M), or low (L).

TMDL Waters

Waters designated as "T" are under study and may lead to TMDL development if results of DEP's investigations warrant implementing a TMDL in order to remedy the water quality impairment. Water bodies so designated are potentially targeted for TMDL development within the next two years. The 2004 list includes 43 water body segments and impairments designated as "T."

High Priority Waters

Waters assigned an "H" are high priority waters for a particular impaired use. Assessment information for "H" waters suggests that a TMDL may be needed to restore uses and solve the impairment. Waters and impairments designated as "H" are targeted for TMDL development within 3-5 years. CT's 2004 list designates 59 waterbodies and impairments as "H".

Medium Priority Waters

Waters assigned an "M" are of medium priority. There may be insufficient information to assess whether a pollutant is causing the impairment to these water bodies, and other programs may remedy the water quality impairment. Waters and impairments designated as "M" are targeted for TMDL development within 5-10 years. CT's 2004 list includes 101 waterbodies and impairments with an "M" designation.

Low Priority Waters

Waters and impairments assigned an "L" are low priorities for TMDL development because other programs are likely to remedy the water quality impairment. Waters/impairments designed as "L" are targeted for TMDL development within 10-13 years. CT's 2004 list includes 165 "L" waterbodies and impairments.

Connecticut employs a five year rotating basin monitoring cycle. As additional data are

compiled, CT is committed to re-prioritizing waters based on factors such as, but not limited to, the nature/severity of the impact, importance of unsupported use, the availability of data or models required for TMDL development, etc. Overall, CT is committed to completing TMDL development for all listed waters by the year 2017.

EPA - New England concludes that CT's waterbody prioritization and identification of waters targeted for TMDL study and/or development during the next 2 years is reasonable and sufficient for the purposes of Section 303(d). CT DEP properly examined and considered the severity of pollution and uses of the listed waters, as well as other relevant factors. In addition, EPA - New England has determined that CT DEP properly ranked those waters listed for TMDL development within the next 2 years by considering the complexity of each TMDL. Further, EPA - New England has determined that CT DEP priority ranking ensures reasonable progress in addressing high priority waters with challenging water quality problems (Memo from Geoffrey H. Grubbs, Supplemental Guidance on Section 303(d) Implementation, August 13, 1992).

Water Bodies on Tribal Lands

EPA's approval of Connecticut's Section 303(d) list extends to all water bodies on the list with the exception of those waters, if any, that are within Indian Country, as defined in 18 U.S.C. Section 1151. EPA is taking no action to approve or disapprove the State's list with respect to those waters at this time. EPA, or eligible Indian Tribes, as appropriate, will retain responsibilities under Section 303(d) for those waters.